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May 1, 2003

HAND DELIVERY

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554 **RECEIVED**

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

RE: AT&T Wireless Services, Inc. Quarterly Report

In the Matter of Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems

CC Docket No. 94-102

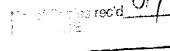
Dear Ms. Dortch:

As required by its <u>TDMA Consent Decree</u>¹ and <u>GSM Consent Decree</u>, ² AT&T Wireless Services, Inc. ("AWS") hereby submits the attached Quarterly Report on its progress toward and compliance with the terms and conditions of the <u>TDMA Consent Decree</u>, <u>GSM Consent Decree</u>, and the Commission's E911 rules.

I. AWS TDMA Network

<u>Phase I and Phase II Requests</u>: This Report includes information on all pending requests for Phase I and Phase II E911 service on AWS' TDMA network, including the entity requesting service,³ the date the request was received, and the status of the request.⁴ For PSAP

As in previous quarterly reports, AWS has listed pending requests by "requesting entity" (which may include multiple PSAPs) and has listed activated PSAPs by requesting entity and by







AT&T Wireless Services, Inc., File No. EB-02-TS-002, NAL/Acct. No. 200232100003, FRN 0003-7665-32, Order, FCC 02-174 (rel. June 18, 2002) ("TDMA Consent Decree").

² AT&T Wireless Services, Inc., File No. EB-02-TS-018, NAL/Acct. No. 200232100002, FRN 0003-7665-32, Order, FCC 02-283 (rel. Oct. 9, 2002) ("GSM Consent Decree").



requests that have been pending for over six months, AWS also has included the projected deployment date and a brief description of the reasons for the delay.⁵

Phase II Service: AWS has contracted with the Grayson Wireless division of Allen Telecom, Inc. ("Grayson") to provide a network-based Phase II location solution for its TDMA network. Grayson has informed the Commission that its technology satisfies the Commission's Phase II accuracy requirements for network-based solutions.⁶

PSAP. AWS is utilizing this format because when it initially receives a request, it does not know whether each PSAP will actually be ready to receive service by the end of the six-month deployment period. AWS does not obtain this information until late in the deployment process, following call routing decisions by the requesting entity and related testing.

See, e.g., Letter from Eliot J. Greenwald, Swidler Berlin Shereff Friedman, LLP, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 94-102, at 1 (May 7, 2001). As set forth in paragraph 12(c) of the TDMA Consent Decree, AWS "is relying on vendor representations in agreeing to the deployment schedule set forth herein and for its belief that a network-based solution will satisfy the Commission's accuracy requirements," TDMA Consent Decree at ¶ 12(c), and "will derive its network-wide location accuracy by selecting the 67 percent and 95 percent accuracy numbers from a set of test data weighted in accordance with OET Bulletin No. 71, Guidelines for Testing and Verifying the Accuracy of Wireless E911 Location Systems, Apr. 12, 2000." TDMA Consent Decree at n.19. OET Bulletin No. 71 states that accuracy testing may be based on the coverage areas of local PSAPs that request Phase II deployment or the wireless carrier's entire advertised coverage area within a metropolitan market.



See exhibits 1, 2, 3, 4, and 5. For this report, AWS has divided activated PSAPs into two categories. Exhibit 4 lists PSAPs where AWS has completed all of the necessary steps for Phase II deployment, other than the steps that are dependent on PSAP readiness, and has confirmed the functional readiness of AWS' location system to deliver location data ("short tested PSAPs"). Exhibit 3 lists PSAPs that have been "integrated" and are receiving and utilizing the Phase II information delivered by AWS.

⁵ See exhibits 2 and 5.



AWS has satisfied each deployment benchmark for its TDMA network falling due in the period since its last Quarterly Report. Specifically, pursuant to paragraph 12(a)(6) of the TDMA Consent Decree, "[f]or any valid PSAP requests for Phase II service on its TDMA or TDMA/AMPS network received by AT&T Wireless on or before February 28, 2002," AWS was obligated "to provide its Phase II compliant solution to 100% of those PSAPs' coverage areas or population by April 1, 2003." As of April 1, 2003, for all PSAPs who requested Phase II service on or before February 28, 2002, AWS either has integrated Phase II service to 100 percent of the PSAP's coverage area or population or it has reached an agreement with the PSAP to extend the integration deadline.

Pursuant to paragraph 12(a)(7) of the <u>TDMA Consent Decree</u>, "[f]or valid PSAP requests received after February 28, 2002, but on or before September 30, 2002," AWS was obligated to "provide its Phase II compliant solution to 50% of those PSAPs' coverage areas or population by April 1, 2003." As of April 1, 2003, for all PSAPs who requested Phase II service after February 28, 2002 but on or before September 30, 2002, AWS either has integrated Phase II service to 50 percent of the PSAP's coverage area or population or it has reached an agreement with the PSAP to extend the integration deadline.

Pursuant to paragraph 12(a)(8) of the <u>TDMA Consent Decree</u>, "[f]or valid PSAP requests received after September 30, 2002," AWS was obligated to "provide its Phase II compliant service to 50% of those PSAPs' coverage areas or population within six months of receipt of such request." As of the date of this Report, for all PSAPs who requested Phase II service after September 30, 2002 but on or before November 1, 2002, AWS either has integrated Phase II service to 50 percent of the PSAP's coverage area or population or it has reached an agreement with the PSAP to extend the integration deadline.

TDMA Consent Decree at ¶ 12(a)(8).



First Office Application ("FOA") testing of the Grayson solution for AWS' Nortel infrastructure was completed successfully on February 14, 2003, which completes AWS' FOA testing for all three of its TDMA switch technologies. FOA testing of the Grayson solution was completed successfully for AWS' Lucent and Ericsson infrastructure several months ago. See November 1, 2002 Quarterly Report at 2.

TDMA Consent Decree at \P 12(a)(6).

⁹ TDMA Consent Decree at ¶ 12(a)(7).



Despite AWS' success in complying with the benchmarks set forth in the <u>TDMA</u>

<u>Consent Decree</u> to date, AWS remains concerned that integration of its Phase II E911 service will be hampered by ongoing issues beyond its control associated with PSAP readiness and ILEC pricing. To date, AWS has been successful in reaching mutually-agreeable deferral dates with requesting entities when PSAP readiness issues have arisen. While AWS plans to seek such agreements whenever necessary, issues with PSAP and LEC readiness often are discovered late in the deployment and integration process, undermining AWS' compliance efforts.

II. AWS GSM Network

<u>Phase I and Phase II Requests</u>: This Report includes a list of all markets where AWS has launched GSM service and the date AWS began offering service in each market. ¹² The Report also includes information on all pending requests for Phase I and Phase II E911 service in these markets, including the entity requesting service, ¹³ the date the request was received, ¹⁴ and



See, e.g., Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, AT&T Wireless Services, Inc. Quarterly Report at 3-4 (filed Aug. 1, 2002) ("August 1, 2002 Quarterly Report"); AT&T Wireless Services, Inc. Interim Report at 3-4 (filed Oct. 18, 2002) ("October 18, 2002 Interim Report"); AT&T Wireless Services, Inc. Quarterly Report at 2-6 (filed Nov. 1, 2002) ("November 1, 2002 Quarterly Report").

See exhibit 6.

As in previous quarterly reports, AWS has listed pending requests by "requesting entity" (which may include multiple PSAPs) and has listed activated PSAPs by requesting entity and by PSAP. AWS is utilizing this format because when it initially receives a request, it does not know whether each PSAP will actually be ready to receive service by the end of the six-month deployment period. AWS does not obtain this information until late in the deployment process, following call routing decisions by the requesting entity and related testing.

While AWS tracks PSAP requests based upon the date the request was received, AWS frequently receives requests for Phase II service in markets where AWS has not yet deployed GSM service. Under the FCC's rules, the six month deadline for responding to a PSAP request does not begin to run in a given GSM market until the date that AWS begins offering service there. See 47 C.F.R. § 20.18(a) (stating that service providers are subject to the FCC's 911 rules "solely to the extent that they offer real-time, two way switched voice service that is interconnected with the public switched network...") (emphasis added).



the status of the request.¹⁵ For PSAP requests that have been pending for over six months, AWS also has included the projected deployment date and a brief description of the reasons for the delay.¹⁶

Phase II Service: AWS has ordered equipment from Grayson to provide a network-based Phase II location solution for AWS' GSM network that is similar to the TDOA solution Grayson is providing for AWS' TDMA network. Grayson has informed the Commission that its technology satisfies the Commission's Phase II accuracy requirements. As set forth in paragraph 9(c) of the GSM Consent Decree, AWS "is relying on vendor representations in agreeing to the deployment schedule set forth herein and for its belief that a network-based solution will satisfy the Commission's accuracy requirements."

AWS is still in the process of running the two FOA tests of the Grayson GSM TDOA solution. The first FOA in Ft. Myers, Florida allowed AWS to demonstrate successfully the operation of the Grayson GSM TDOA solution on the Nokia infrastructure and was nearing completion when it was delayed by a stability issue in the ABIS Monitor Units ("AMUs"), which is described in more detail below.

There were several delays prior to the commencement of the second FOA in York, Pennsylvania on the Ericsson infrastructure. Hardware installation problems required AWS to



¹⁵ <u>See</u> exhibits 7, 8, and 9.

See exhibits 8 and 9.

See, e.g., Letter from Eliot J. Greenwald, Swidler Berlin Shereff Friedman, LLP, to William F. Caton, Acting Secretary, FCC, CC Docket No. 94-102, at 1 (March 26, 2002); Letter from Eliot J. Greenwald, Swidler Berlin Shereff Friedman, LLP, to Magalie Roman Salas, Secretary, FCC, CC Docket No. 94-102, at 1 (May 7, 2001).

GSM Consent Decree at ¶ 9(c). AWS "will derive its network-wide location accuracy measurements by selecting the 67 percent and 95 percent accuracy numbers from test data weighted in accordance with OET Bulletin No. 71, Guidelines for Testing and Verifying the Accuracy of Wireless E911 Location Systems, Apr. 12, 2000" and AWS' "location accuracy testing should be consistent with the guidelines of OET Bulletin No. 71, which states that accuracy testing may be based on the coverage areas of local PSAPs that request Phase II deployment or the wireless carrier's entire advertised coverage area within a metropolitan market." Id. at n. 10.



install antenna sharing units in every cell tower where a wireless location sensor ("WLS") is installed. These antenna sharing units have been installed and are no longer delaying the start of the FOA. An additional problem preventing AWS from completing the Ericsson FOA has been a delay in getting certain software from Grayson that allows the ("AMUs") to operate normally on the Ericsson network. While Grayson has since delivered the necessary software, lab testing of this software has not been successful to date. AWS hopes to complete lab testing of the software by early May and then complete the Ericsson FOA testing thereafter.

As noted above, another issue has developed with regard to the ABIS signaling links that may impact the expected completion date of both FOAs, and potentially AWS' compliance with the June 30, 2003 benchmark for its GSM network. The AMU monitors the signaling traffic on the GSM network and looks for 911 calls. When 911 calls are identified by the AMU, the call set-up information is sent to the TDOA system to determine the location of the caller. The primary ABIS signaling links are carried on a physical link called a DS-3. The current software in the DS-3 cards in the AMU is not completely stable and the AMU may intermittently miss the location of "911" calls. This condition results in the 911 call defaulting to Phase I E911 service, rather than receiving Phase II treatment. AWS hopes to resolve this issue quickly and will keep the Commission apprised of the status of those efforts.

AWS has satisfied each deployment benchmark for its GSM network falling due in the period since its last Quarterly Report. Specifically, pursuant to paragraph 9(a)(2) of the GSM Consent Decree, AWS was obligated "[t]o deploy a Phase II compliant technology at a minimum of 2,000 cell sites on its GSM network by March 31, 2003," which required AWS to install at the cell site "all hardware and base release software necessary to provide Phase II service." While testing of the Grayson GSM TDOA solution continues, Grayson has been installing the equipment in AWS cell sites in order to satisfy the benchmarks set forth in the GSM Consent Decree. As of March 31, 2003, AWS satisfied this benchmark.



GSM Consent Decree at $\P 9(a)(2)$.

This milestone, by its terms, refers only to the cellsite-located hardware and base release software needed to provide Phase II E911 service, and does not include other E911 hardware and software, such as the AMU elements. <u>Id.</u> at ¶ 3(i).

See <u>GSM Consent Decree</u> at n. 9 (explaining that the network-based location technology that AWS currently plans to employ has not yet been fully validated on AWS' network).



GSM Compliance Plan: Paragraph 4 of Attachment A to the GSM Consent Decree requires the AWS E911 Compliance Officer to meet not less than twice a year with all AWS personnel materially involved in E911 to review and explain the FCC's E911 rules, the FCC's rules regarding truthful statements and the obligation to maintain the accuracy and completeness of any pending FCC application, and the requirements of the GSM Consent Decree. Peter White, E911 Compliance Officer for AWS, has been conducting those meetings on an ongoing basis since AWS' last Quarterly Report. AWS also has updated its written advisory on the E911 rules to reflect the recent changes to the FCC's rules regarding truthful statements, and the updated written advisories were distributed as part of the compliance training. A copy is attached hereto as exhibit 11.

As required by the <u>TDMA Consent Decree</u> and the <u>GSM Consent Decree</u>, a copy of this Report is being filed with the Chief of the Enforcement Bureau, the Chief of the Wireless Telecommunications Bureau, and the Executive Directors and Counsels of APCO, NENA, and NASNA, as well as the other staff listed below. If you have any questions, please contact the undersigned.

Sincerely,

Douglas J. Brandon/mm

Douglas I. Brandon

Attachments

cc: David H. Solomon, Chief, Enforcement Bureau
Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau
John Ramsey, Executive Director, APCO

GSM Consent Decree at Attachment A, ¶ 2.



Under the terms of the <u>GSM Consent Decree</u>, AWS must identify the cell sites at which its Phase II technology has been installed. <u>GSM Consent Decree</u> at ¶ 11(b)(3). The cell sites in question are identified in exhibit 10.

GSM Consent Decree at Attachment A, ¶ 4.



> Robert M. Gurss, Counsel, APCO Jim Goerke, Interim Executive Director, NENA James R. Hobson, Counsel, NENA Evelyn Bailey, President, NASNA

Bryan Tramont Jennifer Manner Paul Margie Samuel Feder Barry Ohlson

James Schlichting Blaise Scinto Patrick Forster

Jennifer Tomchin Lisa Fowlkes Kathryn Berthot

AFFIDAVIT OF GREG LANDIS

I, Greg Landis, do hereby declare under penalty of perjury under the laws of the United States of America that the following is true and correct:

I am an officer of AT&T Wireless Services, Inc.

I have received semi-annual E911 compliance training and the advisory and accompanying admonition, and understand AWS' obligations to comply with all E911 rules, the requirements of the GSM and TDMA consent decrees, and sections 1.17 and 1.65 of the FCC's rules.

I have reviewed the AWS E911 Phase II Quarterly Report and to the best of my knowledge, information, or belief, all of the information contained in the Report is truthful and accurate.

Greg Landis

Executive Vice President &

General Counsel

Executed on May 1, 2003

May 01 03 02:29p

AFFIDAVIT OF ROD NELSON

I, Rod Nelson, do hereby declare under penalty of perjury under the laws of the United States of America that the following is true and correct:

I am an officer of AT&T Wireless Services, Inc.

I have received semi-annual E911 compliance training and the advisory and accompanying admonition, and understand AWS' obligations to comply with all E911 rules, the requirements of the GSM and TDMA consent decrees, and sections 1.17 and 1.65 of the FCC's rules.

I have reviewed the AWS E911 Phase II Quarterly Report and to the best of my knowledge, information, or belief, all of the information contained in the Report is truthful and accurate.

> Executive Vice President & Chief Technology Officer

Executed on $\frac{5/1}{0.3}$

AFFIDAVIT OF GREGORY SLEMONS

I, Gregory Slemons, am an officer of AT&T Wireless Services, Inc.

I have reviewed the AWS E911 Phase II Quarterly Report and to the best of my knowledge, information, or belief, all of the information contained in the Report is truthful and accurate.

I have received semi-annual E911 compliance training and the advisory and accompanying admonition, and understand AWS' obligations to comply with all E911 rules, the requirements of the GSM and TDMA consent decrees, and sections 1.17 and 1.65 of the FCC's rules.

I do hereby declare under penalty of perjury that the foregoing is true and correct.

Gregory Semons
Gregory Stemons

Executive Vice President - Wireless Network Services

Executed on 5/1/03